LAW OFFICES
FENNEMORE CRAIG
A PROFESSIONAL CORPORATION

Timothy Berg
Direct Phone: (602) 916-5421
Direct Fax: (602) 916-5621
tberg@fclaw.com

OFFICES IN:
PHOENIX, TUCSON & NOGALES
3003 NORTH CENTRAL AVENUE
SUITE 2600
PHOENIX, ARIZONA 85012-2913
PHONE: (602) 916-5000
FAX: (602) 916-5999

August 30, 2000

VIA HAND DELIVERY

Docket Control
ARIZONA CORPORATION COMMISSION
1200 West Washington
Phoenix, Arizona 85007

Re: U S WEST Communications, Inc.'s Compliance with Section 271 of the Telecommunications Act of 1993, Docket No. T-00000A-97-0238

To Whom It May Concern:

Enclosed for filing in the above matter are the original and ten copies of the Rebuttal Affidavit of Karen A. Stewart. If you have any questions, please do not hesitate to contact me.

Very truly yours,

Timothy Berg

TB/dp
Enclosure

cc: All parties of record
/939981.1/67817.172
PHX/DPOOLE/1100933.1/67817.150

BEFORE THE ARIZONA CORPORATION COMMISSION

CARL J. KUNASEK
CHAIRMAN
JIM IRVIN
COMMISSIONER
WILLIAM A. MUNDELL
COMMISSIONER

IN THE MATTER OF QWEST CORPORATION'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	DOCKET NO. T-00000B-97-0238

REBUTTAL AFFIDAVIT OF

KAREN A. STEWART

QWEST CORPORATION

August 30, 2000

AFFIDAVIT INDEX

I. Identification of Affiant

My name is Karen A. Stewart. I am a Director in the Qwest Corporation (Qwest), formerly known as U S WEST Communications, Inc. Regulatory Strategy organization.[1] My office is located at 421 SW Oak Street, Portland, Oregon. I filed an affidavit on March 25, 1999 providing direct testimony in this docket. In addition, I filed a supplemental affidavit on July 21, 2000.

II. Purpose of Rebuttal Affidavit

The purpose of my rebuttal testimony is to reply to the testimony of the four parties commenting on line sharing, sub-loop unbundling, access to dark fiber, and Qwest's obligation to provide access to unbundled packet switching: specifically the testimony of Thomas T. Priday of WorldCom, Inc. (WCom); the comments of AT&T and TCG Phoenix (AT&T); the testimony of J. Scott Bonney, Jr. on behalf of Rhythms Links Inc.; and the comments of Cox Arizona Telecom, L.L.C. (Cox).

Attached as exhibits to this rebuttal testimony are red-lined versions of the SGAT sections concerning line sharing, sub-loop unbundling and dark fiber. The base SGAT used to create the red-lining was filed in Arizona on July 21, 2000. At the conclusion of the workshop, Qwest will file updated SGAT pages in both Arizona and Nebraska to incorporate the agreed to changes that result from the workshop.

---

[1] Qwest Corporation is the successor to U S WEST communications, Inc. Qwest filed an Authority to Transact Business application with the Commission on July 6, 2000. That application is pending. Nevertheless, given that Qwest's principal place of business is in Colorado, and that the name change is effective there, this pleading has been filed under the name of Qwest.

As described in my supplemental testimony and in this rebuttal testimony, Qwest satisfies the requirements of Section 271 of the Act and the FCC's rules for advanced services.

III. Scope of Advanced Services Workshop

The Advanced Services workshop will review Qwest's Advanced Services obligations that have emerged in the past year primarily as a result of the FCC's Third Interconnection Order in CC Docket No. 96-98 ("UNE Remand Order')[2] and the Line Sharing Order in CC Docket Nos. 98-147 and 96-98.[3] The Line Sharing Order, as its name implies, added a requirement for line sharing and the Third Interconnection Order added requirements for: sub-loop unbundling, access to dark fiber, and in limited circumstances, unbundled packet switching.

In WCom's reply comments to my supplemental Advanced Services testimony, Mr. Priday discussed Qwest's unbundled loop offerings. Mr. Priday expressed specific concerns regarding the types of xDSL loops available to CLECs in Section 9.2 (Unbundled Loops) of the SGAT.[4] Specifically, that Qwest offers ADSL qualified loops and also offers an xDSL capable loop. As an initial matter in Arizona, dedicated unbundled loop issues will be discussed as part of Checklist item 4 in the Workshop on November 14-16. Moreover, my supplemental affidavit addressed many of the

---

2 Third interconnection Order and Fourth Notice of Proposed Rulemaking, CC Docket No. 96-98, FCC 99-238, (November 5, 1999) (Third Interconnection Order or UNE Remand Order).

3 Third interconnection Order, CC Docket No. 98-147, and Fourth Report and Order, CC Docket No. 96-98, FCC 99-355 (December 9, 1999) (Line Sharing Order).

4 WCom comments pages 4-7.

concerns identified by Mr. Priday. Qwest, with its revised SGAT filed on July 21, 2000, clearly offers generic xDSL loops as requested by WCom.[5] However, Mr. Priday's assertion is misplaced. Qwest offers "unloaded loops" to support CLEC's xDSL service. CLECs can assess the loop characteristics using Qwest's Loop Qualification Tool and determined whether the loop will support its form of DSL. Second, Qwest offers ADSL capable loops, which means a loop capable of transmitting data comparable to Qwest's retail Megabit service. This ensures the CLECs have both options.

In addition, AT&T makes the general statement that Qwest must allow CLECs to provide voice and high-speed data service over unbundled loops.[6] Qwest clearly allows CLECs to provide any telecommunications services that a particular element, such as unbundled loops, can support. Specifically, the SGAT states:

> 9.1.5 CLEC may connect UNEs in any technically feasible manner. Qwest will provide CLEC with the same features, functions and capabilities of a particular element that Qwest provides to itself. Qwest will not restrict the types of telecommunications services CLEC may offer through unbundled elements, nor will it restrict CLEC from combining elements with any technically compatible equipment CLEC owns. U S WEST will provide CLEC with all of the functionalities of a particular element, so that CLEC can provide any telecommunications services that can be offered by means of the element. Qwest shall provide such unbundled network elements in a manner that allows CLEC to combine such elements in order to provide Telecommunications Service.

Beyond this, I will respond to the unbundled loop issues identified by Mr. Priday and AT&T in my Checklist item 4 rebuttal testimony.

In its reply comments, AT&T also draws a distinction between "line sharing" and "line splitting." As identified by AT&T, in the SBC Section 271 application in the Texas

---

5 Stewart Supplemental Affidavit at page 95

proceeding, the FCC defined "line splitting" as when both the voice and data service will be provided by competitive carriers over a single loop, [7] while "line sharing" occurs when the ILEC provides the voice service and another CLEC provides the data service.[8]

Qwest will allow line splitting, i.e., CLECs can provide voice and data over a single loop, and combine that loop with Qwest provided unbundled local switching and shared transport. However, as correctly identified by AT&T, this is not line sharing. Qwest proposes that line splitting and its related combination issues be addressed in the October 3-5 workshop that will address the checklist Items 2, 5, and 6; and UNE-Combinations.

However, Qwest would like to state at this time, that it strongly disagrees with the AT&T request that Qwest be required to purchase, own and deploy line splitters, and thus allow AT&T to order those loops as UNE-P, on a line-by-line basis. This request was rejected by the FCC in the Texas 271 order. Specifically the FCC stated:

> 326. AT&T also argues that it has a right to line splitting capability over the UNE-P with SWBT furnishing the line splitter.[9] AT&T alleges that this is "the only way to allow the addition of xDSL service onto UNE-P loops in a manner that is efficient, timely, and minimally disruptive."[10] Furthermore, AT&T contends that competing carriers have an

---

6 AT&T Comments at page 16

7 In the Matter of Application by SBC Communications inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, inc., d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the telecommunications Act of 1996 to provide In-Region, interLATA Services in Texas, FCC 00-238, CC Docket No. 00-65 (Released June 30, 2000) at ¶330 ("Texas 271 Order").

8 Texas 271 Order at ¶324.

9 *See* AT&T Texas II Pfau/Chambers Decl. at paras. 40-42; *see also* IP Communications at 12, 14.

10 AT&T Texas II Pfau/Chambers Decl. at para. 41.

obligation to provide access to all the functionalities and capabilities of the loop, including electronics attached to the loop.[11] AT&T contends that the splitter is an example of such electronics and that it is included within the loop element.[12]

327. **We reject AT&T's argument that SWBT has a present obligation to furnish the splitter when AT&T engages in line splitting over the UNE-P**. The Commission has never exercised its legislative rulemaking authority under section 251(d)(2) to require incumbent LECs to provide access to the splitter, **and incumbent LECs therefore have no current obligation to make the splitter available**.[13] As we stated in the *UNE Remand Order*, "with the exception of Digital Subscriber Line Access Multiplexers (DSLAMs), the loop includes attached electronics, including multiplexing equipment used to derive the loop transmission capacity."[14] We separately determined that the DSLAM is a component of the packet switching unbundled network element.[15] We observed that "DSLAM equipment sometimes includes a splitter" and that, "[i]f not, a separate splitter device separates voice and data traffic."[16] **We did not identify any circumstances in which the splitter would be treated as part of the loop, as distinguished from being part of the packet switching element.** That distinction is critical, because we declined to exercise our rulemaking authority under section 251(d)(2) to require incumbent LECs to provide access to the packet switching element, and our decision on that point is not disputed in this proceeding. (emphasis added)

328. **The *UNE Remand Order* cannot fairly be read to impose on incumbent LECs an obligation to provide access to their splitters.** . .(emphasis added)

Thus, this issue has been resolved by the FCC against AT&T. Qwest further recommends that this Commission defer discussions on line-by-line access to line splitting (even assuming new requirements were to occur) until such time as a clear requirement has been ordered by the FCC.

In addition, WCom expressed concerns of a general nature regarding Qwest's offering of Advanced Services. Following is an identification of the issues raised and Qwest's reply to each of these issues. I have identified general Advanced Services issues with the prefix "AS".

---

11 AT&T Texas II Pfau/Chambers Decl. at paras. 40-42.
12 AT&T Texas II Pfau/Chambers Decl. at para. 40.
13 *See* 47 U.S.C. § 251(d)(2); *AT&T Corp. v. Iowa Utils. Bd.*, 119 S. Ct. 721, 736 (1999).
14 *UNE Remand Order*, 15 FCC Rcd at 3776, para. 175.
15 *UNE Remand Order*, 15 FCC Rcd at 3833, paras. 302-303.
16 *UNE Remand Order*, 15 FCC Rcd at 3833, para. 303.

AS-1. WCom requests that Qwest's technical publications be consistent with or incorporate recognized industry standards. WCom does not identify any specific examples, but rather makes broad brush allegations.

Qwest does base its technical publications on industry standards. Qwest also commits in its SGAT to cooperate in the development of national standards "for Interconnection elements as the competitive environment evolves."[17] That does not mean that Qwest adopts every telecommunications industry "standard". For example, Qwest's DS1 products are based on a 1.544 Mbps digital signal over T-1 transmission facilities standard. While in European countries, companies frequently use the industry "standard" for E1 to deliver a similar service, i.e. 2.048 Mbps over a T-1 digital carrier system. The fact that Qwest does not incorporate the E1 standard into our technical publications does not make it any less "standards" based.

Thus, Qwest can not agree to an overly broad statement that our technical publications will be based on all industry standards. However, if WCom has specific concerns (or recommendations) about a specific technical publication, Qwest is willing to review the request and provide a timely response.

---

[17] Arizona SGAT at Section 21.4

AS–2. WCom requests that CLECs be allowed to order new services based on their introduction in technical publications, without having to amendment their interconnection agreement.[18]

Qwest cannot accept this recommendation. Qwest does not introduce or offer new retail or wholesale products and services solely based on their inclusion in technical publications. For example, technical publications typically do not include rates and charges. Qwest introduces new products in a variety of ways depending on the service and its regulatory status. Standard methods of introduction include: tariffs, price lists and individual case based contracts.

Moreover, if a CLEC's interconnection agreement does not contain a UNE or Advanced Service available from Qwest, Qwest will amend its agreement, on an expedited basis, to include the UNE without the need for the BFR process or lengthy negotiations. The purpose of the SGAT is to provide CLECs with an easy vehicle for such opt in capability. Qwest has also provided CLECs with the ability to begin the service order process for new UNEs before an interconnection agreement has been approved by a state Commission. This assumes that such an action on the part of Qwest is not prohibited by a state Commission, and a Letter of Agreement has been executed by the parties to cover the period of time the interconnection agreement approval is pending before the Commission.

---

[18] WCom Comments at page 3

IV. Line Sharing

Qwest satisfies all of the requirements for Section 271 of the Act and the FCC's requirements for line sharing as identified in the September 9, 1999 Line Sharing order. As identified in my Supplemental Affidavit, the Qwest Shared Loop product had been developed in cooperation with all interested Data Competitive local Exchange Carriers (DLECs)[19]. Qwest believes these current providers of advanced data services were in the best position to review and shape the Qwest Shared Loop offering.

Both AT&T and WCom were invited to participate in this process and declined to participate. Had AT&T and WCom participated in this industry forum, their line sharing issues could have been addressed in context with the issues and concerns raised by other interested DLECs.

The comments of AT&T, Rhythms and WCom identified the following issues regarding Section 9.4 Line Sharing in the Arizona SGAT. Attached as Exhibit KAS-1 is a proposed revision of the Line Sharing Section 9.4 of the Arizona SGAT to reflect Qwest's proposed changes as identified below.

LS-1. WCom believes the forecasting requirements of Section 9.4.2.1.7 place an undue administrative burden upon the CLEC, and may also require the CLEC to disclose confidential information.[20]

---

19 Stewart Supplemental Affidavit at pages 11-15
20 WCom Comments at 11

As documented in my supplemental testimony, the DLECs that opted into the Interim Line Sharing Agreement agreed to provide confidential forecasting information to Qwest. Specifically:

> Beginning on April 1, 2000, the CLECs will provide ILEC with non-binding, good faith rolling quarterly forecasts for shared line volumes on a state-by-state, central office-by-central office basis. Additionally, CLEC will provide a 1.5-year non-binding, good-faith forecast by quarter to ILEC by June 1, 2000. ILEC will keep CLEC forecasts confidential and will not share forecasts with any person involved in ILEC retail operations, product planning or marketing.[21]

This confidential forecasting information allowed Qwest to prioritize and install in record time the equipment necessary to support line sharing in 349 central offices in 13 states by July 31, 2000. Qwest recommends that Section 9.4.2.1.7 retain the obligation of CLECs to provide periodic forecasts for line sharing. I am not aware of any complaints regarding Qwest's use of the confidential forecasting information as required by the Interim Line Sharing Agreement. Qwest would agree to add the following statement into Section 9.4.2.1.7 of the SGAT ensuring that forecasts are treated as confidential:

> Qwest will keep CLEC forecasts confidential and will not share forecasts with any person involved in Qwest retail operations, product planning or marketing.

LS-2. WCom requests removal of the requirement in Section 9.4.2.1.3 that CLEC provided data service must be compatible with Qwest's POTS service, and that

---

[21] Interim Line Sharing Agreement at para. 17.

Multiple Virtual Lines (MVL) transmission systems be added to the presumed compatible list.[22]

Clearly, the FCC intended that any xDSL technology deployed by a CLEC in a line sharing arrangement would not interfere with analog voiceband transmissions, which is a basic requirement for the effective delivery of POTs service. The FCC stated:

> 70. As described in detail below, we require incumbent LECs to provide access to this network element to a single requesting carrier, on loops that carry the incumbent's traditional POTs, to the extent that the xDSL technology deployed by the competitive LEC does not interfere with the analog voiceband transmissions. . . (footnote omitted)[23]

Qwest believes that the CLEC has an obligation to insure its data service does not interfere with voiceband transmissions. Qwest proposes to modify Section 9.4.2.1.3 to more closely align with the wording of the FCC on these two issues raised by WCom:

> 9.4.2.1.3 CLEC may use the HUNE to provide any xDSL services that will not interfere with analog voiceband transmissions. Such services currently are limited to ADSL, RADSL, Multiple Virtual Lines (MVL) and G.lite. In the future, additional services may be used by CLEC to the extent those services are deemed acceptable for Line Sharing deployment under applicable FCC rules.

LS-3. AT&T requests that CLECs be permitted to collocate DSLAM equipment on Qwest premises.[24]

So long as space is available, Qwest will allow CLECs to collocate DSLAMs on Qwest's premises. This is true, not only in central office collocation space, but in

---

22 WCom Comments at 11
23 Line Sharing order at para. 70.
24 AT&T Comments at 16

remote field locations. Qwest recommends that the collocation of DSLAMs be reviewed in the continuation of the Collocation workshop.

LS-4. AT&T and WCom request a direct connection option, i.e., the removal of the ICDF frame requirement, between the COSMIC/MDF and CLEC collocated line splitters or splitters that are placed in a common area of the central office.[25]

Qwest accepts this recommendation and will agree to modify the Arizona SGAT Line Sharing language to be consistent with the Colorado SGAT Line Sharing language that allow for direct connections between the COSMIC/MDF and CLEC provided splitters. Qwest clarifies that in the negotiations with the interested DLECs for the Interim Line Sharing Agreement, that no DLEC requested direct connections to the COSMIC/MDF.

LS-4A. AT&T requests Qwest allow for a direct connections option that would allow CLECs to provisioning cables to every other or every third module on the COSMIC/MDU.[26]

This issue is currently before the group in the Collocation Workshop. Qwest recommends that this issue remain in the Collocation workshop. Qwest has agreed to consider this issue and will be prepared to report on this subject in the follow-up workshop.

---

[25] AT&T Comments at page 20
[26] AT&T Comments at page 21

LS-4B. AT&T requests that Qwest input a CLEC's need for direct connections to the COSMIC into a planned Mechanized Engineering and Layout for Distributing Frame ("MELD") run and not require the CLECs to fund a separate MELD run.[27]

This issue is currently before the group in the Collocation Workshop. Qwest recommends that this issue remain in the Collocation workshop. Qwest has agreed to consider this issue and will be prepared to report on this subject in the follow-up workshop.

LS-4D. AT&T requested more detail on the connectivity involved to support line sharing..[28]

CLECs can obtain access to the Line Sharing Technical Publication No. 77406 at URL www.uswest.com/wholesale/notification/techPub.html.

LS-5. AT&T requests a review of the rates and rate elements for line sharing in a permanent cost docket.[29] Rhythms requests that Qwest not be allowed to recover the cost of loop conditioning on loops below 18 kilofeet.[30]

Qwest believes that permanent rates for line sharing will be reviewed in Phase II of the cost docket No. T00000A-00-0194. However, Qwest clarifies that the interim rates established in the Arizona SGAT, and its Interim Line Sharing Agreements, are

---

27 AT&T Comments at page 22
28 AT&T Comments at page 20
29 AT&T Comments at page 21

clearly sufficient to meet its requirement to have a legally binding obligation to provide line sharing.

Qwest does not agree with Rhythms that it be precluded from recovering its costs for loop conditioning for loops below 18 kilofeet. The United State Court of Appeals for the Eight Circuit has already determined that ILECs have the right to recover the real cost of providing the specifically requested network element. That costs for interconnection and UNEs cannot be based on a hypothetical network, they must be based on the network that actually exists. The Court specifically stated:

> We agree with petitioners that basing the allowable charges for the use of an ILEC's existing facilities and equipment (either through interconnection or the leasing of unbundled network elements) on what costs would be if the ILEC provided the most efficient technology and in the most efficient configuration available today utilizing its existing wire center locations violates the plain meaning of the Act. . . Congress was dealing with reality, not fantasizing about what might be. . . it expressly said that the ILECs' costs of providing those facilities and that equipment were to be recoverable by just and reasonable rates.

Moreover, the FCC has specifically held that ILECs can recover their costs for conditioning loops less that 18,000 feet.[31]

LS-6. AT&T request clarification on the "Tie Cable Reclassification" requirement.[32]

Line Sharing Tie Cable Reclassification is only relevant when a CLEC requests that existing tie cables between its collocation and the Intermediate Distribution Frame be designated for use with its commonly located line sharing splitter. The

---

30 Rhythms Testimony at page 5

reclassification activity is necessary to allow proper voice and voice/data assignments during the shared loop provisioning process. Therefore, this nonrecurring charge is for the physical work activity associated with tie cable reclassification for the database work to change the naming of those tie cables in the TIRKS and SWITCH databases and re-stenciling of the terminations on the IDF itself.

LS-7. Rhythms requested a shorter standard interval for line sharing than the 5 business days identified in the SGAT.[33]

Qwest cannot accept the Rhythms request for a shorter interval on shared loops. Contrary to the statement by Mr. Bonney, "The only work effort that needs to be performed by Qwest to provision a line-shared lines is for a technician at the central office to perform a lift-and-lay of the customers line", Qwest must perform numerous other order entry, assignment and provisioning functions. Exhibit KAS-6, in my supplemental testimony, diagrams the Shared Loop provisioning process and describes the provisioning task list functions.

In addition, Qwest believes the 5-business day installation interval in non-discriminatory and compares favorably with the 10-business day installation time frame for Qwest's retail Megabit service.

---

31 UNE Remand at para. 193.
32 AT&T Comments at page 21
33 Rhythms Testimony at page 3

LS-8. Rhythms requests that Qwest provide loop conditioning for shared loops.[34]

Qwest now offers conditioning on shared loops. As documented in my supplemental affidavit, both the Interim Line Sharing Agreement, and the Arizona SGAT made loop conditioning on shared loops available as of July 31, 2000 under the same guidelines as conditioning for all other unbundled loops. Specifically the Interim Line Sharing Agreement states:

> Prior to July 31, 2000, the CLECs will not request conditioning of shared lines to remove load coils, bridged taps or electronics. If ILEC begins conditioning lines for its xDSL services, CLECs will have the same option. By July 31, 2000, unless another date is agreed to by ILEC and CLEC in writing, the CLEC will be able to request conditioning of a shared line. ILEC will perform requested conditioning, including de-loading and removal of excess bridged taps, unless ILEC demonstrates in advance that conditioning that shared line will significantly degrade the end-user's analog voice service.[35]

The Arizona SGAT at Section 9.4.2.1.5:

> Prior to July 31, 2000, CLEC will not request, and Qwest will not provide, conditioning of Shared Loops to remove load coils, excess bridged taps, or electronics. If Qwest begins to condition copper loops for its xDSL services prior to July 31, 2000, CLEC will have the same option, however, by July 31, 2000, unless another date is agreed to by Qwest and CLEC in writing, CLEC will be able to request conditioning of Shared Loops. Qwest will perform requested conditioning, including de-loading and removal of excess bridged taps, unless Qwest demonstrates in advance that conditioning a Shared Loop will significantly degrade the end user's analog voice-grade POTS service. Based on the pre-order make-up of a given copper loop, CLEC can make a preliminary determination if the loop can meet the technical parameters applicable to the data service it intends to provide over the loop. After a Shared Loop is ordered and the design layout record is reviewed by CLEC, it is CLEC's responsibility to determine if the Shared Loop meets the technical parameters applicable to the data service it intends to provide over the Shared Loop.

Since July 31, 2000 has passed, Qwest would agree to amend 9.4.2.1.5 to remove references to this date.

---

34 Rhythms Testimony at page 4
35 Interim Line Sharing Agreement at para. 4

LS-9. Rhythms request line sharing over fiber-fed loops.

Qwest does not fully understand the Rhythms request to line share over fiber distribution loops. Qwest requests that Rhythms provide additional information that would allow Qwest to appropriately evaluate the technical feasibility of line sharing over fiber distribution loops. Qwest does not currently have approved cards for fiber fed digital loop carrier systems that will provide for DSLAM functionality.

V. Sub-Loop Unbundling

The comments of AT&T, Rhythms, WCom and COX identified the following issues regarding Section 9.3 Sub-loop in the Arizona SGAT. Attached as Exhibit KAS-2 is a current revision of the Sub-loop Section 9.3 of the Arizona SGAT to be used in the workshop. I have identified Sub-loop issues by the prefix "SB".

SB-1. AT&T, and Cox and WCom request that Qwest expand its points of interface to access sub-loop elements in its SGAT to include:

1. Distribution facilities
2. Feeder facilities
3. Feeder/Distribution Interface (FDI)
4. Minimum Point Of Entry (MPOE)
5. Network Interface Device (NID)
6. Riser Cable in multistory buildings
7. Inside Wire
8. Peripheral Distribution Facilities
9. Wire Closets
10. Digital Loop Carrier cabinets
11. Single Point of Interface (SPOI)
12. Central Office Terminal, COSMIC or MDF
13. Pole or Pedestal
14. And any other technically feasible element or point of interface.

Qwest has already agreed to allow CLECs to access sub-loops at all technically feasible terminals in Qwest's outside plant. The current Qwest developed sub-loop offerings were based on what Qwest believes will be the most likely requested access points. Qwest has had very limited demand for sub-loop unbundling. Given the extensive number of potential locations and points for interface that have been identified by the parties in reply comments, it is difficult for Qwest to anticipate how access to each point would best be achieved. Qwest recommends that the collocation process and procedures be used to establish network demarcation points. A clear network demarcation point between Qwest and the CLEC would provide a design to point, i.e. for network design and inventorying. Once network demarcation points have been established, Qwest believes it can use many of the processes developed for its unbundled feeder and distribution sub-loop offering as identified in my Supplemental testimony at Exhibits KAS 10-14 to provision the actual sub-loop.

This approach is consistent with the FCC's recent collocation Order on Reconsideration and Second Further Notice of Proposed Rulemaking in CC Docket No. 98-147 released on August 10, 2000.

Qwest proposes to work with the parties to develop SGAT language that will preserve the current sub-loop offerings for interested CLECs, but will provide additional clarity about the willingness of Qwest to work with CLECs, using a Field Collocation offering, to meet the sub-loop unbundling needs of CLECs.

SB–2. AT&T requests that Qwest provide access to sub-loop elements for all loop types, to include:

1. 2 wire copper
2. 2 wire non-loaded copper
3. 4 wire copper
4. DS-1 carrier
5. DS-3 carrier
6. OC-3 through OC-xx SONET over fiber

Qwest agrees to provide access to sub-loops for all loop types. However, Qwest would clarify that for loops at DS3 and above, there is in reality only a "feeder" portion for each loop. The cost model for fiber based loops does not have a traditional copper-based distribution portion. Qwest would recommend that rates and clarification of the cost nature of DS3 sub-loops be deferred to the Phase II of the Arizona UNE Deaveraging Docket.

SB-3. AT&T and Cox request that access to the distribution portion of loops to serve Multiple Dwelling Units (MDUs) be identified as a unique distribution sub-loop element.

Currently, all distribution configurations are averaged to create the unbundled two-wire distribution loop. This includes the high-density distribution loops that serve MDUs. If Qwest were to create a "de-averaged" sub-loop element for MDUs, it could result in a rate increase for other types of distribution sub-loops. Moreover, this issue was already decided in the Arizona cost docket. Thus, AT&T and Cox are merely

attempting to further deaverage the loop elements. This is the wrong docket to raise this argument.

Qwest would propose, in the Phase II of the Arizona UNE Deaveraging Docket, that if additional deaveraging is necessary for sub-loops, that sub-loops be deaveraged consistent with how unbundled loops will be deaveraged. Qwest believes the conceptual framework for sub-loops can be productively discussed in the Advanced Services Workshop. However, actual rate levels and potential rate changes for access to high density versus access to low density sub-loops could more productively be discussed in the context of the Phase II of the cost docket.

SB-4. AT&T does not believe the Field Connection Point (FCP) provides equivalent access to sub-loop elements and request a review of the FCP policy, applications and processes, to include installation intervals and cost sharing among CLECs.

As stated above, Qwest recommends the FCP process and Field Collocation process be combined. In concept, the FCP is simply a splice point that could be created at numerous access points in the outside plant network. Given its potentially limited space in Feeder/Distribution Interfaces (FDIs), Qwest had initially developed the FCP with the assumption that the CLEC would have to build a separate structure to terminate its network. By using the Field Collocation process, the CLEC would have

the flexibility, for example, to "collocate" in the FDI if space permits, and potentially eliminate the need for a separate structure.

SB-5. AT&T states that rates are not available for sub-loop elements. These rates were set by the ACC in the cost docket.

Qwest has rates in the Arizona SGAT in Appendix A for sub-loop elements.

SB-6. AT&T request access to the high frequency portion of the distribution sub-loop to provide DSL services.

As stated before, Qwest will allow collocation of DSLAMs and splitters in the field, space permitting. Thus, Qwest will unbundle technically feasible access to the high frequency portion of the distribution sub-loop.

VI. Dark Fiber

AT&T and Mr. Priday on behalf of WCom filed comments on Qwest's dark fiber offering. Following is an identification of the issues raised by both parties and Qwest's reply to each of these issues. Attached as Exhibit KAS-3 is a proposed revision of the Dark Fiber section 9.7 of the Arizona SGAT to reflect Qwest's proposed changes as identified below. I have identified Dark Fiber issues by the prefix "DF".

DF-1. WCom requests the removal of the modifier "substantially" the same quality in the description of dark fiber in SGAT section 9.7.2.1.[36]

In the Bell Atlantic New York decision the FCC established that equal access and "substantially the same as" are interchangeable terms when describing a BOC's obligation to provide access to a network element:

> . . . Thus, where a retail analogue exists, a BOC must provide access that is equal to (i.e., substantially the same as) the level of access that the BOC must provide . . .[37]

Qwest recommends retaining the word "substantially" in light of the FCC's identification that equal access to UNEs may not be identical access to UNEs. This is consistent with the parties agreement reached in the resale docket where the word "substantially" was retained.

DF-2. Both AT&T and WCom recommend that defined installation intervals be established for dark fiber. WCom recommends the same interval as 2-wire and 4-wire unbundled loops.

Qwest does have defined installation intervals for dark fiber interoffice and loop facilities. The installation interval is 10 days for an Initial Records Inquiry[38] and a 20-business day installation interval once Qwest receives the order for any identified dark fiber that terminates at a Qwest wire center or end-user premise. Should a CLEC request access to dark fiber at a point in the Qwest network other than a wire center or

---

36 WCom comments at page 12
37 NY at para 44

end-user premise, Qwest has established a 20-day period to provide a feasibility study and quote. Given the extremely limited demand, and various access points that might be request, Qwest has established an Individual Case Base (ICB) installation period.

Qwest can not accept the WCom request that Qwest install dark fiber in the same 5-day installation interval as unbundled two wire loops. Qwest believes it already has a reasonable installation interval based on the industry bench mark that has been established by SWBT's approved 271 application. SWBT has a 30-business day interval to install dark fiber once the dark fiber availability has been established.

DF-3. Both AT&T and WCom recommend that the reciprocal provision of dark fiber in 9.7.2.2 by the CLEC to the ILEC be eliminated in the SGAT.[39]

Qwest accepts this recommendation, and proposes that 9.7.2.2 be changed to "Reserved for future use."

DF-4. AT&T and WCom believe any limitations on the amount of dark fiber available to the CLECs be reasonable and relate to a likely and foreseeable threat to Qwest's ability to provide service as a carrier of last resort. Both AT&T and WCom make several suggestions to clarify on what basis Qwest may deny a request to unbundled dark or reclaim dark fiber to meets its legal obligations.

---

38 See Arizona SGAT at 9.7.3.2
39 AT&T at page and WCom at page 12

AT&T and WCom have made numerous recommendations regarding changes to the following sections that clarify Qwest's ability to limit the amount of Dark Fiber in a single route a CLEC can use, and under what circumstances can Qwest re-claim that fiber from the CLEC.

First, Qwest agrees that the circumstances were it can reclaim dark fiber are when it is in danger of not meeting its legal obligations to provide service.

Second, Qwest agrees to the burden of demonstrating to the Commission, that Qwest needs to reclaim the dark fiber to meet its legal obligations to serve.

Third, Qwest does not agree to remove all limitations from the SGAT about the volume of dark fiber an individual CLEC can "tie-up" in a single route. Qwest believes that the efficient use of dark fiber, and allowing more than one CLEC to have access to dark fiber on a route, is in the best interest of the industry as a whole. Following are Qwest's proposed SGAT language on the relevant sections:

9.7.2.4 Qwest will provide Unbundled Dark Fiber to CLEC in increments of two strands (by the pair). CLEC may obtain up to 25% of available dark fibers or four dark fiber strands; whichever is greater, in each fiber cable segment over a 12 month period. CLEC must demonstrate efficient use of those fibers before leasing additional fiber in each cable segment. Efficient use of interoffice cable segments is defined as providing a minimum of OC-12 capacity on each fiber pair. Efficient use of loop fiber is defined as providing a minimum of OC-3 capacity on each fiber pair.

9.7.2.5 Qwest shall not have an obligation to unbundle Dark Fiber in the following circumstances:

a) Qwest will not unbundle Dark Fiber utilized for maintenance or reserved for maintenance spare. Qwest shall not reserve more than 5% of the fibers in a sheath for maintenance or maintenance spare.

b) Qwest will not be required to unbundle Dark Fiber if Qwest demonstrates to the Commission by a preponderance of the evidence that such unbundling would create a likely and foreseeable threat to its ability to provide services as required by law. In such circumstances, Qwest shall be relieved of its unbundling obligations, related to the specific Dark Fiber at issue, during the pendancy of the proceeding before Commission.

9.7.2.10 Upon twelve (12) month notification to CLEC or as defined by Commission, Qwest reserves the right to reclaim in part or in whole, but only to the extent necessary for Qwest to meet its legal obligations to serve. UDF previously obtained by CLEC. This condition would arise in those cases where Qwest has demonstrated to the Commission that a likely and foreseeable threat exists to Qwest's ability to meet or maintain control of its obligation to provide services as required by law.

DF-5. WCom states that CLECs are not provided with an opportunity to reserve dark fiber for maintenance/maintenance spares.[40]

This is incorrect. Qwest allows CLECs to determine their needs for dark fiber, to include, maintenance spares, and (subject to reasonable limitations as identified above) to request access to the required number of dark fiber strands.

Qwest bears the cost of maintaining its own maintenance spares and believes it is reasonable for other CLECs to incur and bear the cost of inventorying the level of maintenance spares they believe is appropriate for their network design and the level of service offered to their end-users.

DF-6. WCom request the removal of the requirement for an ICDF when a CLEC request access to dark fiber.

---

[40] WCom comments at page 13.

Qwest accepts this request, and has modified 9.7.3.1 to reflect that when the CLEC has established network demarcation points as part of a collocation application, an "ICDF" will not be required.

DF-7. AT&T requests that unbundled dark fiber be available between a Qwest wire center and a CLEC's wire center. AT&T identifies that this change would require the elimination of collocation on the CLEC end of the dark fiber.

Qwest agrees to unbundle dark fiber that may exist between a Qwest wire center and a CLEC wire center. This dark fiber is more appropriately identified as "extended dark fiber facilities' to identify the non-distance sensitive nature of this type of facility, i.e. like an interconnection or switched access entrance facility. Qwest will work with the parties to develop appropriate SGAT changes, to include the elimination of the collocation requirement on the CLEC's end of the entrance facility.

DF-8. AT&T requests clarification that the limitation to provide access to "existing Dark Fiber" in SGAT section 9.7.2.3 can not be interpreted to imply that new dark fiber installed after the effective date of the SGAT would not be considered "existing".

Qwest clarifies its intent in using the word "existing" is to identify dark fibers that are existing and available in the Qwest network at the time the dark fiber Initial Records Inquiry is received by Qwest. The term "existing" does not have a relationship to the

amount or location of dark fiber facilities "existing" on the effective date of the Arizona SGAT.

DF-9. AT&T recommends changes to Section 9.7.2.11, to allow for combinations of dark fiber with another UNE or CLEC facilities.

Qwest accepts this recommendation. As identified in my supplemental affidavit, in Arizona, so long as the Ninth Circuit decision remains in place, Qwest will provide CLECs with access to UNE combinations, whether they be UNEs Qwest ordinarily combines, UNEs Qwest does not ordinarily combine, or combinations of Qwest UNEs with CLEC UNEs.[41]

The SGAT states:

> CLEC may request access to and, where appropriate, development of, additional UNE Combinations pursuant to the Bona Fide Request Process in CLEC's Agreement. In its BFR request, CLEC must identify the specific combination of UNEs, identifying each individual UNE by name as described in this Agreement.[42]

To the extent the UNE Remand has identified dark fiber as a UNE, Qwest will make combinations of dark fiber available upon request. Qwest does not normally make combinations of dark fiber in its network. The CLEC would be responsible for all design and interoperability concerns with a dark fiber combination. Qwest proposes 9.7.2.11 be to changed to "Reserved for future use." This change is currently for Arizona only.

---

41 Stewart Supplemental Affidavit at pages 58-59
42 SGAT at 9.23.3.8

DF-10. AT&T objects to Section 9.7.2.15 because it can be implied to require CLECs to obtain third party permission, license or authority to access rights away.

Qwest does not agree to a modification to Section 9.7.2.15 at this time. Qwest does agree with AT&T that the parties can more productively discuss this section in the context of Pole, Duct and Right Away Issues that have already been resolved.

DF-11. AT&T believes that Section 9.7.2.16 should be modified to reflect that when a CLEC returns dark fiber it may not be in its "original condition" due to reasonable "wear and tear".[43]

Qwest accepts this recommendation and proposes to remove any reference to original condition. Qwest proposes that Section 9.7.2.16 be revised to state:

> 9.7.2.16 The CLEC will incur all costs associated with disconnecting the UDF from its side of the network demarcation point.

DF-12. In section 9.7.3.2, AT&T believes Qwest should provide notification of the available fiber and all the potential routes that can be used.

Qwest does not agree to provide notification of all available routes. Qwest agrees to evaluate all economically viable routes identified in TIRKS during the Initial Records Inquiry. For dark fiber inquiries, should more than one route be identified in TIRKS, Qwest will quote the CLEC the most direct route, i.e. the route with the shortest number of route miles.

DF-13. AT&T proposes that Qwest accept good faith, non-binding forecasts of transport needs from CLECs for Qwest's use in determining its network design and expansion requirements.

Qwest does not accept the addition of an SGAT obligation to include a CLEC's future interoffice transport requirements in its plans to build new routes or to expand capacity on existing interoffice routes. The FCC clearly affirmed its limitation that a LEC is only required to unbundle existing services and is not required to construct new facilities:

> . . . In the Local Competition First Report and Order, the Commission limited an incumbent LEC's transport unbundling obligations to existing facilities, and did not require incumbent LEC's to construct facilities to meet a requesting carrier's requirements where the incumbent LEC has not deployed transport facilities for its own use. . . [44]

In the SGAT, Qwest limits requests for forecasts to situations where a forecast is required to provide interconnection or access to UNEs that already exist in its network.

VII. Packet Switching

Both AT&T and WCom filed comments regarding Qwest's obligation to provide unbundled packet switching. Following is an identification of the issues raised by both parties, and Qwest's reply to each of these issues. I have identified Packet Switching issues by the prefix "PS".

---

[43] AT&T Comments at page 44.
[44] UNE Remand Order at para 324.

PS-1. Does Qwest have an obligation to provide unbundled packet switching in Arizona?

Both AT&T and WCom filed comments regarding Qwest's obligation to provide unbundled packet switching, referencing paragraph 313 of the UNE Remand, for their basis that Qwest must unbundled packet switching. As correctly identified by WCom,[45] Qwest's obligation to unbundle packet switching is directly related to whether or not Qwest has placed DSLAMs in a remote terminal. Specifically the FCC stated:

> . . . Accordingly, the incumbent LECs must provide requesting carriers with access to unbundled packet switching in situations in which the incumbent has placed its DSLAM in a remote terminal. . .[46]

The FCC rules for packet switching must be read in context with this quote from paragraph 313 of the UNE Remand. Section 51.319 of the FCC's rules states:

> (B) An incumbent LEC shall be required to provide nondiscriminatory access to unbundled packet switching capability only **where each of the following conditions are satisfied (emphasis added)**:
>
> (i) The incumbent LEC has deployed digital loop carrier systems, including but not limited to, integrated digital loop carrier or universal digital loop carrier systems; or has deployed any other system in which fiber optic facilities replace copper facilities in the distribution section *(e.g.*, end office to remote terminal, pedestal or environmentally controlled vault);
>
> (ii) There are no spare copper loops capable of supporting the xDSL services the requesting carrier seeks to offer;
>
> (iii) The incumbent LEC has not permitted a requesting carrier to deploy a Digital Subscriber Line Access Multiplexer at the remote terminal, pedestal or environmentally controlled vault or other interconnection point, nor has the requesting carrier obtained a virtual collocation arrangement at these subloop interconnection points as defined by § 51.319(b); and

---

45 WCom comments at page 14.
46 UNE Remand at para. 313

(iv) The incumbent LEC has deployed packet switching capability for its own use.

Clearly rule (iv) is related to the situation identified in paragraph 313 where an ILEC has placed DSLAMs in its remote terminals. On a practical basis, if the first three conditions are indeed met, and Qwest did not have a DSLAM located in a remote terminal, unbundled packet switching located in the central office would be of little value. The CLEC (or Qwest for that matter) would not be able to connect the end user to that central office placed (or even central office accessed) DSLAM on a clean copper pair.

Qwest currently has such a limited number of remotely deployed DSLAMs, serving such a limited number of customers, that it believes the four conditions identified by the FCC would rarely exist in Qwest's current network configuration.

However, Qwest will contractually commit to unbundling packet switching should a CLEC be unable to obtain clean copper loops or remotely collocate its DSLAM in a remote terminal were Qwest has an existing DSLAM.

In the interest of full disclosure, Qwest is currently studying the feasibility of placing remotely deployed DSLAMs on a broader scale. Should Qwest elect to deploy remotely located DSLAMs in its network for use by retail customers, Qwest will concurrently develop and deploy a network architecture that will provide space for CLECs to also remotely locate their DSLAMs in remote field locations such as at Feeder Distribution Interfaces (FDIs).). In this circumstance, Qwest believes the

CLECs should be required to work with Qwest proactively to provide its deployment plans to Qwest, on a confidential basis so Qwest can appropriately size the cabinets.

In summary, given the current status of packet switching, Qwest stands ready to provide unbundled packet switching on an Individual Case Basis (ICB) in Arizona in the unlikely situation that the four conditions outlined by the FCC were to exist.

PS-2. AT&T proposes that Qwest have an obligation to provide unbundled packet switching, even if spare copper loops were available to a CLEC, if those loops were longer than the copper loops Qwest or another CLEC may be utilizing.[47]

Qwest does not accept this AT&T proposal. The FCC has not put any obligation on ILECs to insure that copper loops of a similar length are available to CLECs. Specifically, the FCC stated:

> . . . In this situation, where no spare copper facilities are available, competitors are effectively precluded altogether from offering xDSL service if they do not have access to unbundled packet switching. . . .[48]

The only "qualifier" in regards to copper loops that can be inferred by the FCC comments regarding the profile of the copper loops is that the loops be capable of being conditioned to support xDSL services.

---

47 AT&T Comments at page 37
48 UNE Remand at para. 313

VII. Conclusion

My rebuttal testimony responded to comments by WCom, AT&T, Cox and Rhythms regarding Qwest provisioning of Advanced Services: line sharing, sub-loop unbundling, access to dark fiber, and Qwest's obligation to provide access to unbundled packet switching. Qwest meets the requirements in the Act and the related FCC orders.

Moreover, in my rebuttal affidavit, Qwest has documented its willing to work with the parties to clarify and improve its Advanced Services offerings to meet the needs of CLECs in Arizona and Nebraska.

This concludes my affidavit.

9.4 Line Sharing

9.4.1 Description

Line Sharing provides CLEC with the opportunity to offer advanced data services simultaneously with an existing end user's analog voice-grade (POTS) service on a single copper loop referred to herein as the "Shared Loop" or "Line Sharing", by using the frequency range above the voice band on the copper loop. This frequency range will be referred to herein as the High Frequency Spectrum Network Element ("HUNE"). A POTS splitter separates the voice and data traffic and allows the copper loop to be used for simultaneous data transmission and POTS service. The POTS service must be provided to the end user by Qwest.

9.4.2 Terms and Conditions

9.4.2.1 General

9.4.2.1.1 To order the HUNE, CLEC must have a POTS splitter installed in the Qwest Wire Center that serves the end user as provided for in this Section, and the end user must have dial tone originating from a Qwest switch in that Wire Center. CLEC must provide the end user with, and is responsible for, the installation of a splitter, filter(s) and/or other equipment necessary for the end user to receive separate voice and data service across a single copper loop.

9.4.2.1.2 The POTS splitter must meet the requirements for central office equipment collocation set by the FCC in its March 31, 1999 order in CC Docket No. 98-147.

9.4.2.1.3 CLEC may use the HUNE to provide any xDSL services that will not interfere with analog voiceband transmissions.~~are compatible with Qwest's POTS service.~~ Such services currently are limited to ADSL, RADSL and G.lite. In the future, additional services may be used by CLEC to the extent those services are deemed acceptable for Line Sharing deployment under applicable FCC rules.

9.4.2.1.4 CLEC may not order the HUNE on a given copper loop if Qwest, or another telecommunications carrier, is already using the high frequency spectrum, unless the end user disconnects the original telecommunications carrier's high-frequency service.

9.4.2.1.5 Prior to ~~July 31, 2000~~, CLEC will not request, and Qwest will not provide, conditioning of Shared Loops to remove load coils, excess bridged taps, or electronics. If Qwest begins to condition copper loops for its xDSL services prior to ~~July 31, 2000~~, CLEC will have the same option, however, by ~~July 31, 2000~~, unless another date is agreed to by Qwest and CLEC in writing, CLEC will be able to request conditioning of Shared Loops. Qwest will perform requested conditioning, including de-loading and removal of excess bridged taps, unless Qwest demonstrates in advance that conditioning a Shared Loop will significantly degrade the end user's analog voice-grade POTS service. Based on the pre-order make-up of a given copper loop, CLEC can make a preliminary determination if the loop can meet the technical parameters applicable to the data service it intends to provide over the loop. After a Shared Loop is ordered and the design layout record is reviewed by CLEC, it is CLEC's responsibility to determine if the Shared Loop meets the technical parameters applicable to the data service it intends to provide over the Shared Loop.

9.4.2.1.6 Qwest will provide CLEC with access to the HUNE through POTS splitters installed in Qwest Wire Centers. POTS splitters may be installed in Qwest Wire Centers in either of the following ways at the discretion of CLEC: (a) via the standard Collocation arrangements set forth in the Collocation Section; or (b) via Common Area Splitter Collocation as set forth in this Section. Under either option, POTS splitters will be appropriately hard-wired or pre-wired so that Qwest is not required to inventory more than two points of termination.

9.2.4.1.7 CLEC will provide Qwest with non-binding, good faith, rolling quarterly forecasts for Shared Loop volumes on a Wire Center-by-Wire Center basis. CLEC will also provide an eighteen (18) month, non-binding, good faith, quarterly forecast to Qwest in thirty (30) calendar days after the signing of this Agreement. Qwest will keep forecasts confidential and will not share forecasts with any person involved in Qwest retail operations, product planning or marketing.

9.4.2.2 CLEC Collocation Area Splitter

9.4.2.2.1 If CLEC elects to have POTS splitters installed in Qwest Wire Centers via the standard Collocation arrangements set forth in the Collocation Section, CLEC will be responsible for purchasing the POTS splitters. CLEC also will be responsible for installing and maintaining POTS splitters in its Collocation areas within Qwest Wire Centers.

9.4.2.2.2 CLEC may designate some or all of its existing TIE Cables for use in connection with Line Sharing. Qwest will perform any necessary TIE Cable reclassifications, frame re-stenciling, and related work for which it is responsible and that is required to provision Line Sharing. Charges will apply pursuant to this Section of the Agreement.

9.4.2.2.3 Two ITPs and two TIE Cables will be needed to connect POTS splitters to the Qwest network. One ITP will carry both voice and data traffic from the COSMIC/MDF loop termination, to an appropriate ICDF. From this frame, one TIE Cable will carry both voice and data traffic to the POTS splitter located in CLEC's Collocation area. The voice and data traffic will be separated at the POTS splitter. The data traffic will be routed to CLEC's network within its Collocation area. The voice traffic will be routed to the COSMIC/MDF switch termination, via the ICDF, using a second TIE Cable and a second ITP.

9.4.2.2.4 The demarcation points between Qwest's network and CLEC's network will be the place where the combined voice and data loop is cross-connected to the ICDF.

9.4.2.3 Common Area Splitter Collocation

9.4.2.3.1 If CLEC elects to have POTS splitters installed in Qwest Wire Centers via Common Area Splitter Collocation, the POTS splitters will be installed in those Wire Centers in one of the following locations: (a) in a relay rack as close to CLEC's DSO termination points as possible; (b) on an ICDF to the extent such a frame is available; or (c) where options (a) and (b) are not available, or in Wire Centers with network access line counts of less than 10,000 on the Cosmic/MDF or in some other appropriate location such as an existing Qwest relay rack or bay. CLEC either may purchase POTS splitters or have Qwest purchase POTS splitters on its behalf subject to full reimbursement. Qwest will be responsible for the installation and maintenance of the POTS splitters, but CLEC will lease the POTS splitters to Qwest at no cost. Qwest may co-mingle the POTS splitters shelves of different CLECs in a single relay rack or bay. Qwest will not be responsible for shortages of POTS splitters, or Qwest's inability to obtain POTS splitters from vendors, if acting as purchasing agent on behalf of CLEC.

9.4.2.3.2 Two ITPs and four TIE Cables will be needed to connect the POTS splitters to the Qwest network. One ITP will carry both voice and data traffic from the COSMIC/MDF loop termination, to an appropriate ICDF. From this frame, one TIE Cable will carry both voice and data traffic to the POTS splitter. The voice and data traffic will be separated at the POTS splitter, and the separated voice and data traffic will be routed to the ICDF via separate TIE Cables (i.e., the second and third TIE Cables). At the ICDF, the data traffic will be routed to CLEC's Collocation area via a fourth TIE Cable, and the voice traffic will be routed to the COSMIC/MDF switch termination, via a second ITP.

9.4.2.3.3 Qwest will provide the cabling used for TIE Cables between the POTS splitter and the ICDF. The POTS Splitter Tie Cable Connection Charge will apply.

9.4.2.3.4 The demarcation point between Qwest's network and CLEC's network will be at the place where the data loop leaves the POTS splitter on its way to CLEC's Collocated equipment.

9.4.3 Rate Elements

9.4.3.1 Recurring Rates for Shared Loop

9.4.3.1.1 Shared Loop Charge - A monthly recurring charge for the use of the Shared Loop will apply.

9.4.3.1.2 OSS Charge - A monthly recurring charge to recover upgrades to Qwest Operational Support Systems required to accommodate Line Sharing will apply.

9.4.3.2 Non-Recurring Rates for the Shared Loop

9.4.3.2.1 Basic Installation Charge for Shared Loop – A non-recurring charge for each Shared Loop installed Qwest will apply. If CLEC requests conditioning of a Shared Loop, a non-recurring conditioning charge specified in Exhibit A will apply for removal of load coils and excess bridged taps.

9.4.3.3 Non-Recurring Rates for Tie Cable Reclassification

9.4.3.3.1 Reclassification Charge -- A non-recurring charge will apply, based on time and materials for reclassification of existing TIE cable capacity, by among other things, reclassification of existing TIE cables for Line Sharing, frame restenciling, and any other work performed between CLEC's collocation and the ICDF required to provision Line Sharing.

9.4.3.4 Non-Recurring Rates for Maintenance and Repair

9.4.3.4.1 Trouble Isolation Charge – A non-recurring charge for Trouble isolation will be applied in accordance with Section 12.3.4.

9.4.3.4.2 Additional Testing – CLEC may request Qwest to perform additional testing, and Qwest may decide to perform the requested testing on a case-by-case basis. A non-recurring charge will apply in accordance with Exhibit A.

9.4.3.5 Rates for Common Area Splitter Collocation

9.4.3.5.1 Splitter Shelf Charge – This charge recovers installation and ongoing maintenance associated with splitter installation, bay installation, lighting costs, aerial support structures, grounding charge and engineering labor. These are both recurring and non-recurring charges.

9.4.3.5.2 POTS Splitter Charge – A non-recurring charge will apply for the cost of each POTS splitter purchased by Qwest on behalf of CLEC. This charge will cover the cost of the POTS splitter, plus any associated costs incurred by Qwest to order the POTS splitter.

9.4.3.6 POTS Splitter TIE Cable Connections Charge – A non-recurring charge will apply for the cost of each TIE Cable connected to the POTS splitters. This charge will cover both the TIE cables and associated blocks per 100 pair between the POTS splitter and the ICDF.

9.4.3.7 The rates for each of the aforementioned Line Sharing rate elements are set forth in Exhibit A. All of these rates are interim and will be subject to true up based on either mutually agreed to permanent rates or permanent rates established in a Line Sharing cost proceeding conducted by the Commission. In the event interim rates are established by the Commission before permanent rates are set, the interim rates set forth in Exhibit A will be changed to reflect the interim rates set by the Commission; however, no true up will be performed until mutually agreed to permanent rates are established or permanent rates are set established by the Commission.

9.4.4 Ordering Process

9.4.4.1 Shared Loop

9.4.4.1.1 As a part of the pre-order process, CLEC can access loop characteristic information through the Loop Information Tool described in the Support Functions Section. CLEC will determine, in its sole discretion and at its risk, whether to order the HUNE across any specific copper loop. Qwest and CLEC will work together to modify the Loop Information Tool to better support Line Sharing.

9.4.4.1.2 Prior to placing an LSR for Shared Loop, CLEC must obtain a Proof of Authorization from the end user customer in accordance with the Proof of Authorization Section.

9.4.4.1.3 Splitter Meet Points for Shared Loop will be provided to CLEC on the Line Sharing Actual Point of Termination (APOT) form specifically for Shared Loop requests. CLEC will provide on the LSR, the appropriate frame terminations which are dedicated to POTS splitters. Qwest will administer all cross connects/jumpers on the COSMIC/MDF and ICDF.

9.4.4.1.4 Basic Installation "lift and lay" procedure will be used for all Shared Loop orders. Under this approach, a Qwest technician "lifts" the Loop from its current termination in a Qwest Wire Center and "lays" it on a new termination connecting to CLEC's Collocated equipment in the same Wire Center.

9.4.4.1.5 Qwest will provision the Shared Loop within the standard unbundled loop provisioning interval, as defined in Exhibit C.

9.4.4.1.6 CLEC shall not place orders for Shared Loops until all work necessary to provision Line Sharing in a given Qwest Wire Center, including, but not limited to, POTS splitter installation and TIE Cable reclassification or augmentation has been completed, or July 31, 2000, whichever is later.

9.4.4.2 Common Area Splitter Collocation

9.4.4.2.1 This section only applies to situations where CLEC orders placement of the splitter in a common area.

9.4.4.2.2 New POTS splitter shelves may be ordered at the same time as a new Collocation on a single Collocation application form. A single ordering processing charge applies. Standard intervals as contained in Exhibit C will apply.

9.4.4.2.3 New POTS splitter shelves may be ordered with an existing Collocation. CLEC must submit a new Collocation application form and the applicable fee to Qwest. Standard intervals as contained in Exhibit C will apply.

9.4.4.3 TIE Cable Reclassification

9.4.4.3.1 To the extent CLEC has existing TIE Cables extending from an ICDF to its Collocation space, CLEC may request that these existing TIE Cables be reclassified for use with Line Sharing. CLEC shall request such reclassification through the same process used to order new terminations.

9.4.5 Repair and Maintenance

9.4.5.1 Qwest will allow CLEC to access Shared Loops at the point where the combined voice and data loop is cross-connected to the POTS splitter.

9.4.5.2 Qwest will be responsible for repairing voice services provided over Shared Loops and the physical line between network interface devices at end user premises and the point of demarcation in Qwest Wire Centers. Qwest will also be responsible for inside wiring at end user premises in accordance with the terms and conditions of inside wire maintenance agreements, if any, between Qwest and its end users. CLEC will be responsible for repairing data services provided on Shared Loops. Qwest and CLEC each will be responsible for maintaining its equipment. The entity that controls the POTS splitters will be responsible for their maintenance.

9.4.5.3 Qwest and CLEC will continue to develop repair and maintenance procedures for Line Sharing and agree to document final agreed to procedures in a methods and procedures document that will be made available on Qwest's website: http://www.uswest.com/carrier/guides/interconnect/. In the interim, Qwest and CLEC agree that the following general principles will guide the repair and maintenance process for Line Sharing.

9.4.5.3.1 If an end user complains of a voice service problem that may be related to the use of a Shared Loop for data services, Qwest and CLEC will work together with the end user to solve the problem to the satisfaction of the end user. Qwest will not disconnect the data service provided to an end user over a Shared Loop without the written permission of CLEC unless the end user's voice service is so degraded that the end user cannot originate or receive voice grade calls.

9.4.5.3.2 Qwest and CLEC are responsible for their respective end user base. Qwest and CLEC will have the responsibility for resolution of any service trouble report(s) initiated by their respective end users.

9.4.5.3.3 Qwest will test for electrical faults (e.g. opens, and/or foreign voltage) on Shared Loops in response to trouble tickets initiated by CLEC. When trouble tickets are initiated by CLEC, and such trouble is not an electrical fault (e.g. opens, shorts, and/or foreign voltage) in Qwest's network, Qwest will assess CLEC the TIC Charge.

9.4.5.3.4 When trouble reported by CLEC is not isolated or identified by tests for electrical faults (e.g. opens, shorts, and/or foreign voltage), Qwest may perform additional testing at the request of CLEC on a case-by-case basis. If this additional testing uncovers electrical fault trouble (e.g. opens, shorts, and/or foreign voltage) in the portion of the network for which Qwest is responsible, CLEC will not be charged by Qwest for the testing. If this additional testing uncovers a problem in the portion of the network for which CLEC is responsible, Qwest will assess the appropriate miscellaneous charge.

9.4.5.4 When POTS splitters are installed in Qwest Wire Centers via Common Area Splitter Collocation, CLEC will order and install additional splitter cards as necessary to increase the capacity of the POTS splitters. CLEC will leave one empty splitter card in every shelf to be used for repair and maintenance until such time as the card must be used to fill the shelf to capacity.

9.4.5.5 When POTS splitters are installed in Qwest Wire Centers via standard Collocation arrangements, CLEC may install test access equipment in its Collocation areas in those Wire Centers for the purpose of testing Shared Loops. This equipment must meet the requirements for Central Office equipment set by the FCC in its March 31, 1999 order in CC Docket No. 98-147.

9.4.5.6 Qwest and CLEC will work together to address end user initiated repair requests and to prevent adverse impacts to the end user.

9.4.6 Other

9.4.6.1 Qwest and CLEC agree to work together to address and, where necessary and possible, find solutions for the following Line Sharing implementation issues: (i) the development of an effective phased process for handling CLEC orders for the HUNE; (ii) Qwest's ability to handle the existing and forecasted volume of CLEC orders for the HUNE; (iii) Qwest's ability to make loop assignments for the existing and forecasted volume of CLEC orders for the HUNE; (iv) the ability of Qwest and CLEC to coordinate repairs; (v) the experience and education of the Shared Loop end user; (vi) CLEC's forecasts of HUNE orders; and (vii) the process for conditioning Shared Loops by removing load coils and excess bridged taps.

9.3 Sub-loop Unbundling

9.3.1 Description

9.3.1.1 Sub-loop is defined as any portion of the loop that it is technically feasible to access in Qwest's terminals in outside plant, i.e. an accessible terminal, pole, pedestal, Feeder Distribution Interface (FDI) or Minimum Point Of Entry (MPOE) including inside wire (owned by Qwest). An accessible terminal is any point on the Loop where technicians can access the wire or fiber within the cable without removing a splice case and/or digging up or trenching underground to reach the wire within.

9.3.1.2 Two types of standard Sub-Loops are available.

a) Two-Wire Unbundled Distribution Loop

b) DS1 Capable Unbundled Feeder Loop

9.3.1.3 Sub-Loop Unbundling is only available after a CLEC-requested Field Connection Point (FCP) has been installed at the technically feasible accessible terminal. The FCP provides a demarcation point for the termination of the Qwest-provided Sub-Loop, and the necessary cross-connections to CLEC-provided facilities. The FCP shall be located in direct proximity to the Qwest Sub-Loop facility accessed by CLEC. The FCP shall be ordered pursuant to Section 9.3.7 herein.

9.3.2 Two-Wire Unbundled Distribution Loop

9.3.2.1 The Two-Wire Unbundled Distribution Loop is a Qwest provided facility from the Qwest FCP at the FDI to the demarcation point or Network Interface Device (NID) at the end-user location. The Two-Wire Unbundled Distribution Loop includes, but is not limited to, distribution facilities that serve Multiple Dwelling Units (MDUs). The Two-Wire Unbundled Distribution Loop is suitable for local exchange-type services within the analog voice frequency range of 300 to 3000 Hz. CLEC obtains access to this unbundled element at the FDI through an established FCP arrangement, and at the end-user location through the NID.

9.3.3 DS1 Capable Unbundled Feeder Loop

9.3.3.1 DS1 Capable Unbundled Feeder Loop is a digital transmission path that is provisioned from a Qwest Central Office Network Interface, which consists of a DSX-1 panel or equivalent, to the Fiber Distribution Interface (FDI) located at the FCP.

9.3.3.2 The DS1 Capable Unbundled Feeder Loop transports bi-directional DS1 signals with a nominal transmission rate of 1.544 Mbit/s.

9.3.4 Terms and Conditions

9.3.4.1 Access to unbundled loop elements may be made, to the extent technically feasible, through the use of the Field Connection Point Process at any technically feasible Feeder Distribution Interface (FDI) and utility room in a multi-dwelling unit.

9.3.4.2 CLEC obtains access to the DS1 Capable Unbundled Feeder Loop at the Qwest Wire Center through established Collocation arrangements, and at the FDI through the FCP. CLEC must provide the necessary space and meet all premise requirements noted in the technical publication DS1 Capable Sub-Loop.

9.3.4.3 Standard access to a Sub-Loop will be at the Feeder Distribution Interface (FDI) through the establishment of a Field Connection Point (FCP). Non-standard access will be submitted via the BFR process in this Agreement.

9.3.5 Rate Elements

9.3.5.1 Sub-Loop Non-Recurring Charge - CLEC will be charged a non-recurring basic installation charge pursuant to Exhibit A for each Sub-Loop ordered by CLEC.

9.3.5.2 Sub-Loop Recurring Charge - CLEC will be charged a monthly recurring charge pursuant to Exhibit A for each Sub-Loop ordered by CLEC.

9.3.5.3 Sub-Loop OSS Charge - CLEC shall be charged pursuant to Exhibit A to recover the cost of the OSS modifications necessary to provide CLEC access to portions of Qwest's feeder and distribution network facilities on an unbundled, sub-loop basis.

9.3.5.4 Sub-Loop Trouble Isolation Charge - CLEC will be charged a Trouble Isolation Charge pursuant to the Support Functions – Maintenance and Repair Section when trouble is reported but not found on the Qwest facility.

9.3.6 Ordering

9.3.6.1 CLEC may only submit orders for Sub-loop elements after the FCP is in place. CLEC will use the termination information provided at the completion of the FCP on the LSR for Sub-Loops.

9.3.6.2 CLEC can order sub-loop elements through the Operational Support Systems described in Access to OSS Section.

9.3.6.3 CLEC shall identify Sub-loop elements by NC/NCI codes.

9.3.7 Field Connection Point Description

9.3.7.1 Field Connection Point allows CLEC to interconnect with Qwest outside of the central office location where it is technically feasible. Field Connection Point allows CLEC to access Unbundled Sub-Loops. The Field Connection Point must be in place before Sub-Loop orders are processed. Access to FCPs at the FDI are generally available. Requests for other Field Connection Point configurations will be considered on an individual case basis. The only use of the FDI Field Connection Point is to provide access to Qwest Sub Loops.

9.3.7.2 Feeder Distribution Interface (FDI) Field Connection Point – A FDI Field Connection Point arrangement requires CLEC to build and place equipment adjacent to the Qwest FDI location. Qwest will place a cable between the field connection point and Qwest's Feeder Distribution Interface. Qwest will perform the splice at the Field Connection Point. Each Provider will only have access to its own facilities. CLEC will have access to the FCP for maintenance purposes.

9.3.8 Terms and Conditions

9.3.8.1 With the exception specified in subparagraph (a) below, Qwest is not required to build additional space for the purpose of accessing sub-loop elements. Qwest shall not preclude CLEC from constructing its own facilities adjacent to Qwest's facilities. CLEC shall obtain any necessary authorizations or rights of way required and shall coordinate its facility placement with Qwest, when placing their facilities adjacent to Qwest's facilities. Obstacles that CLEC may encounter from cities, counties, electric power companies, property owners and similar third Parties, when it seeks to interconnect its equipment at Sub-loop access points, will be the responsibility of CLEC to resolve with the municipality, utility, property owner or other third party.

(a) If CLEC seeks access to Two-Wire Unbundled Distribution Loops that serve an MDU, and there is no accessible MPOE or other accessible terminal to which CLEC can access such subloop elements, and Qwest and CLEC are unable to negotiate a reconfigured single point of interconnection to serve the MDU, Qwest will construct a single point of access at or near the property line of the MDU that is fully accessible to and suitable for CLEC. In such instance, CLEC shall pay Qwest a nonrecurring charge according to Exhibit A.

9.3.8.2 The optimum point and method to access Sub-Loop elements will be determined during the Field Connection Point process. The Parties agree that they will not have direct access to the other Party's network. The Parties recognize a mutual obligation to interconnect in a manner that maintains network integrity, reliability, and security.

9.3.8.3 If the Parties are unable to reach an agreement on the design of the FCP through the Field Connection Point Process, the Parties may utilize the Dispute Resolution process pursuant to Dispute Resolution Section. Alternatively, CLEC may seek arbitration under Section 252 of the Act with the Commission, wherein Qwest shall have the burden of demonstrating to the Commission that there is insufficient space or that the requested interconnection is not technically feasible.

9.3.8.4 CLEC must identify the size and type of cable that will be terminated in the Qwest FCP location. Qwest will terminate the cable into the Qwest FDI if termination capacity is available. If termination capacity is not available, Qwest will expand the FDI at the request of CLEC. CLEC will be responsible for placing the cable from the Qwest FCP to their equipment. Qwest will perform all of the initial splicing at the FCP.

9.3.8.5 CLEC must arrange for power to its own equipment.

9.3.8.6 If Qwest denies a request for FDI Field Connection Point, Qwest will provide to CLEC documentation stating why the request was denied during the feasibility quote process.

9.3.8.7 CLEC may cancel a Field Connection Point request prior to the completion of the request by Qwest by submitting a written request by certified mail to the Qwest Account Manager. CLEC shall be responsible for payment of all costs incurred by Qwest.

9.3.9 Rate Elements

9.3.9.1 Feeder Distribution Interface Field Connection Point – CLEC will complete a Field Connection Point request form. Qwest will develop a quote for the work to be performed based on the information provided by CLEC on the Request Form. Qwest will recover the Field Connection Point cost through individual case basis non-recurring charges.

9.3.9.2 Feasibility Fee – Qwest will charge a feasibility fee to recover cost of reviewing the site and engineering work that must be completed to determine if a site is available.

9.3.9.3 Quote Preparation Fee - Qwest will charge a fee to recover all cost associated with developing a FDI Field Connection Point quote.

9.3.9.4 Construction Fee – Qwest will charge a fee to recover all cost for building the FDI Field Connection point. This fee will cover the cost of augmenting the FDI location so that three CLECs can interconnect at that point. If CLEC is the first provider in the FDI-FCP, it will pay the quoted price. If CLEC is the second provider in the FDI-FCP, it will pay the initial CLEC 50% of Qwest's quoted price. If CLEC is the third CLEC in the FDI-FCP, it will pay each of the original two CLECs 17% of Qwest's quoted price.

9.3.10 Repair and Maintenance

Qwest will maintain all of its equipment and CLEC is responsible for maintaining all of its equipment.

9.3.11 Ordering – FDI Field Connection Point

9.3.11.1 CLEC shall submit a Field Connection Point Request Form to a Qwest Account Representative. The Field Connection Point Request Form must be completed in its entirety.

9.3.11.2 Upon receipt of the Field Connection Point Request Form, Qwest will initiate a feasibility study and FCP quote. Within thirty (30) calendar days from receipt of correctly completed Field Connection Point Request Form, Qwest will notify CLEC if a location is technically feasible and Qwest will develop and send a quote. The Feasibility Study and quote will be valid for thirty (30) calendar days from feasibility and quote notification.

9.3.11.3 Qwest will construct the FCP within 120 calendar days of receipt of payment from CLEC.

9.3.11.4 After construction is complete, CLEC will be notified of its termination location which will be used for ordering Sub-Loops.

9.7 Unbundled Dark Fiber

9.7.1 Description

9.7.1 Unbundled Dark Fiber (UDF) is a deployed, unlit pair of fiber optic cable or strands that connects two points within Qwest's network. UDF is a single transmission path between two Qwest Wire Centers or between a Qwest Wire Center and an end user customer premise in the same LATA and state. UDF exists in two distinct forms: (a) UDF Interoffice Facility (UDF-IOF), which constitutes an existing route between two Qwest Wire Centers; and (b) UDF-Loop, which constitutes an existing loop between a Qwest Wire Center and either a fiber distribution panel located at an appropriate outside plant structure or an end-user customer premises.

9.7.2 Terms and Conditions

9.7.2.1 Qwest will provide CLEC with non-discriminatory access to UDF-IOF and UDF-Loop. Qwest will provide UDF of substantially the same quality as the fiber facilities that Qwest uses to provide service to its own end user customers within a reasonable time frame.

9.7.2.2 Reserved for Future Use.~~CLEC will provide Qwest with non-discriminatory access to UDF-IOF and UDF-Loop. CLEC will provide UDF of substantially the same quality as the fiber facilities that CLEC uses to provide service to its own end user customers within a reasonable time frame.~~

9.7.2.3 Qwest will provide CLEC with access to existing Dark Fiber facilities. CLEC shall be responsible for obtaining and connecting electronic equipment, whether light generating or light terminating equipment, to the Dark Fiber. Qwest will not remove, and CLEC shall be permitted to use, regenerating equipment that already exists in mid-span.

9.7.2.4 Qwest will provide Unbundled Dark Fiber to CLEC in increments of two strands (by the pair). CLEC may obtain up to 25% of available dark fibers or four dark fiber strands, whichever is greater, in each fiber cable segment over a 12 month period. CLEC must demonstrate efficient use of those fibers before leasing additional fiber in each cable segment. Efficient use of interoffice cable segments is defined as providing a minimum of OC-12 capacity on each fiber pair. Efficient use of loop fiber is defined as providing a minimum of OC-3 capacity on each fiber pair

9.7.2.5 Qwest shall not have an obligation to unbundle Dark Fiber in the following circumstances:

a) Qwest will not unbundle Dark Fiber utilized for maintenance or reserved for maintenance spare. Qwest shall not reserve more than 5% of the fibers in a sheath for maintenance or maintenance spare.

b) Qwest will not unbundle Dark Fiber that, as of the day CLEC submits its order for Unbundled Dark Fiber, Qwest has already designated for use in an approved, or pending job on behalf of Qwest or another CLEC.

c) Qwest will not be required to unbundle Dark Fiber if Qwest demonstrates to Commission by a preponderance of the evidence that such unbundling would create a likely and foreseeable threat to its ability to provide its services as required by law. In such circumstances, Qwest shall be relieved of its unbundling obligations, related to the specific Dark Fiber at issue, during the ~~pendancy~~ pendency of the proceeding before Commission.

9.7.2.6 Qwest will provide CLEC with access to the existing Dark Fiber in its network in either single-mode or multi-mode. During the inquiry process, Qwest will inform CLEC of the availability of single-mode and multi-mode fiber.

9.7.2.7 Specifications, interfaces and parameters for Dark Fiber are described in U S WEST's Technical Publication 77383.

9.7.2.8 CLEC is responsible for trouble isolation before reporting trouble to Qwest.

9.7.2.9 CLEC shall not use UDF as a substitute for special or switched access services, except to the extent CLEC provides "a significant amount of local exchange traffic" to its end users over the UDF as set forth by the FCC.

9.7.2.10 Upon twelve (12) month notification to CLEC, or as defined by Commission, Qwest reserves the right to reclaim in part or in whole, but only to the extent necessary for Qwest to meet is obligations to serve, UDF previously obtained by CLEC. This condition would arise in those cases where Qwest has demonstrated to the Commission that a likely and foreseeable threat exists to Qwest's ability to meet or maintain ~~is in jeopardy of meeting or maintaining~~ control of its obligation to provide services as required by law. ~~In addition, if CLEC does not achieve and maintain minimal UDF utilization, as outlined previously in this Section, within 12 months of the UDF's receipt, Qwest may reclaim the facilities and charge CLEC the normal disconnection charges contained in the Interconnection Agreement. Upon request, the CLEC must provide Qwest with evidence verifying minimum UDF utilization. Qwest may conduct an Audit or Examination of CLEC's utilization of the UDF provided under this Agreement pursuant to the terms of the Audit Section of this Agreement. Qwest will provide an alternative means of service when under utilization is found.~~

9.7.2.11 Reserved for Future Use. ~~Qwest will not combine a Dark Fiber element with another Unbundled Network Element or Qwest services, or CLEC facilities. CLEC is responsible for connecting Dark Fiber with CLEC fiber optic terminal or other equipment.~~

9.7.2.12 CLEC must have Collocation at both ends of the UDF-IOF or at the Serving Wire Center of the UDF-Loop.

9.7.2.13 For UDF-Loop, CLEC is responsible for all work activities at the end-user premise. All negotiations with the premise end-user and or premise owner are solely the responsibility of CLEC.

9.7.2.14 For a UDF-Loop terminating at an existing end-user premise FDP, Qwest will provide to CLEC an optical "jumper", not to exceed 30 feet in length, connected to the Qwest UDF-Loop FDP.

9.7.2.15 CLEC is responsible for all permits, licenses, bonds, or other necessary legal authority and permission, at CLEC's sole expense, in order to perform its obligations to gain access to UDF at an outside plant structure. CLEC shall contact all owners of public and private Rights-of-Way to obtain their permission required to perform the necessary work to access UDF. CLEC facilities shall be placed and maintained in accordance with the requirements and specifications of applicable Fiber Communications Standards, the National Electrical code, the National Electrical Safety Code, the rules and regulations of the Occupational Safety and Health Act, and any governing authority having jurisdiction. Access to Right-of-Way shall be in accordance with the Access to Poles, Ducts, Conduits and Rights of Way Section.

9.7.2.16 CLEC will incur all costs associated with disconnecting ~~returning~~ the UDF from is side of the network demarcation point. ~~to its original condition when it disconnects UDF.~~

9.7.3 Ordering Processes

Ordering processes and installation intervals are as follows:

9.7.3.1 Prior to placing an order for UDF, CLEC must first establish a Collocation arrangement in each of the necessary Qwest Wire Centers. CLEC must establish proper ICDF demarcation points as part of its collocation build in order to accommodate the UDF optical terminations.

9.7.3.2 The first step of the UDF ordering process is the inquiry process. CLEC must submit a UDF inquiry through its account team. The UDF inquiry is used to determine the availability of UDF between the two requested locations, UDF-IOF or UDF-Loop. CLEC must specify the two Qwest offices or end-user premise location and the number of fibers requested. Qwest will inform CLEC of the availability of dark fiber that will meet CLEC's request, if any, within 10 business days for an Initial Records Inquiry (IRI).

9.7.3.3 Based on the CLEC request (UDF-Loop or UDF-IOF), there are two possible scenarios.

Termination at a Mid-Point Structure

9.7.3.3.1 If spare fiber is available, and CLEC chooses to proceed, and the request is for UDF-Loop going to a mid-point structure such as a Controlled Environmental Vault (CEV), or Remote Terminal (RT), CLEC will submit the Field Verification Quote Preparation (FVQP) form. Qwest will prepare and submit to CLEC a quote along with the original FVQP within 20 business days of the submission of the FVQP form by CLEC. Quotes are on an Individual Case Basis (ICB) and will include costs and number of days required to provision the service.

9.7.3.3.2 Qwest will begin the provisioning process upon notification from CLEC to proceed and the receipt of 50% of the quoted amount. The notification to proceed is accomplished by completing, signing and returning the original FVQP to the account manager. The account manager will notify CLEC when provisioning is complete and the remaining quoted amount, the non-recurring charges, and recurring charges will be billed.

Termination at Qwest Wire Center or End-user Premise

9.7.3.3.3 If spare fiber is available, and CLEC chooses to proceed, and the request is for a UDF-IOF or a UDF-Loop going to a end-user premise, Qwest will begin the provisioning process upon notification from CLEC to proceed and the receipt of 50% of the non-recurring charges. The notification to proceed is accomplished by completing, signing and returning the original inquiry request to the account manager. Provisioning of this type of request will take 20 business days. CLEC will be notified that provisioning is complete and the remaining non-recurring charges and associated recurring charges will be billed.

9.7.3.4 An order may be canceled any time up to and including the service date. Cancellation charges will apply.

9.7.4 Maintenance and Repair

9.7.4.1 The Parties will perform cooperative testing and trouble isolation to identify where trouble points exist. CLEC cross connections will be repaired by CLEC and Qwest cross connections will be repaired by Qwest. Maintenance and Repair processes are contained in the Support Functions Section of this Agreement .

9.7.5 Rate Elements

9.7.5.1 Dark Fiber rates are contained in Exhibit A of this Agreement and include the following elements:

a) Initial Records Inquiry (IRI). This rate element is a pre-order work effort that investigates the availability of UDF. This is a one-time charge for each route check requested by CLEC. A simple IRI determines if UDF is available between two Qwest wire centers or between a Qwest wire center and Qwest customer premise. A complex IRI determines if UDF is available between a Qwest wire center and an outside structure (CEV, Hut, etc.) along the Loop fiber route. Qwest will bill CLEC the IRI immediately upon receipt of the inquiry. The IRI is a record search and does not guarantee the availability of UDF.

b) Field Verification and Quote Preparation (FVQP). This rate element is a pre-order work effort to estimate the cost of providing UDF access to CLEC at locations other than Qwest Wire Centers or an end-user premises. Qwest will prepare a quote which will explain what work activities, timeframes, and costs are associated with providing access to this FDP location. This quote will be good for 30 calendar days. The FVQP is not necessary when the request is between Qwest wire centers or between a Qwest wire center and customer premise (i.e. IRI).

9.7.5.2 The following rate elements are used once the availability of UDF has been established and CLEC chooses to access UDF.

9.7.5.2.1 Unbundled Dark Fiber - IOF Rate Elements

a) UDF-IOF Termination (Fixed) Rate Element. This rate element has both a recurring and non-recurring component and provides a termination at the interoffice FDP within the Qwest Wire Center. Two UDF-IOF terminations apply. Termination charges apply for each intermediate office terminating at an FDP or like cross-connect point.

b) UDF-IOF Fiber Transport, (Per Mile) Rate Element. This recurring rate element provides a transmission path between Qwest Wire Centers. This is a mileage sensitive element based on the route miles of the UDF rounded up to the next mile.

c) UDF-IOF Fiber Cross-Connect Rate Element. This rate element has both a recurring and non-recurring component and is used to extend the optical connection from the IOF FDP to CLEC's optical demarcation point (ICDF). A minimum of two UDF-IOF fiber cross-connects apply. Cross-connect charges apply for each intermediate office terminating at an FDP or like cross-connect point.

9.7.5.2.2 Unbundled Dark Fiber - Loop Rate Elements

a) UDF-Loop Fiber Non-Recurring Charge: This rate element includes the termination and cross connects at both ends.

b) UDF-Loop Fiber Recurring Charge: This rate element include transport per pair calculated as the average mileage between the originating Qwest Wire Center and the End-user Premise and the terminations and cross connects at both ends.